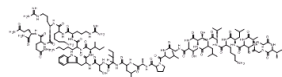


**Product Name** : Melittin

**Synonyms** : —

Cat No. : M22318

**CAS Number** : 20449-79-0



**Molecular Formula** : C131H229N39O31

**Formula Weight** : 2846.46

Chemical Name : \_\_\_\_\_

<b>Description</b>	A2780CR and A2780 cells, with IC50 values of 4.5 and 6.8 µg/mL, respectively. Melittin has natural anti-bacterial, anti-viral, and anti-inflammatory properties. It has also been shown to have diverse anticancer effects in several different cancer cell lines including those of gastric, breast, ovarian, liver, prostate, cervical, and lung origins. The mechanisms by which Melittin, an amphipathic haemolytic peptide, exerts its potential anticancer effects include inhibition of cell proliferation, induction of apoptosis, and direct necrosis. Melittin can also prevent EGF-induced cell invasion through its inhibition of the PI3K/Akt/mTOR signaling pathway, but this is primarily related to breast cancer cells.
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**Pathway** : Metabolic Enzyme/Protease

**Target** : Phospholipase

**Receptor** : PLA2

**Solubility** : H2O:25 mg/mL (8.78 mM)

**SMILES** : (C)C(=O)N[C@@H](CC(C)C)C(=O)N[C@@H]([C@@H](C)CC)C(=O)N[C@@H](CO)C(=O)N[C@@H](Cc1c[nH]c2ccccc12)C(=O)N[C@@H]([C@@H](C)CC)C(=O)N[C@@H](CCCCN)C(=O)N[C@@H](CCCNC(N)=N)C(=O)N[C@@H](CCCCN)C(=O)N[C@@H](CCCNC(N)=N)C(=O)N[C@@H](CCC(N)=O)C(=O)N[C@@H](CCC(N)=O)C(N)=O

**Storage** : (-20°C)

**Stability** :  $\geq 2$  years

**Reference :**

1.Steiner MR, et al. Responses of purified phospholipases A2 to phospholipase A2 activating protein (PLAP) and Melittin. *Biochim Biophys Acta*. 1993 Feb 10;1166(1):124-30.